tical fruit grower. This text contains a detailed discussion of the cause of each disease so far as known so that the grower will not only be able to treat the disease properly but to understand why he is applying the remedy. So far as possible, the work is based on the practical experience of the authors of the book.

F. J. S.

Technical Publication 8 of the New York State College of Forestry at Syracuse is a bulletin of 50 pages and 6 plates devoted to a discussion of the black zones formed by wood-destroying fungi. The author, Mr. A. S. Rhoads, does not claim to have fully solved this problem but he gives an interesting review of the literature and adds a number of results from his own investigations. The black zones are due to decomposition products formed in the decay of the wood, which infiltrate the cell walls to a greater or less extent, frequently becoming so abundant as to form numerous brown drops within the cells. The formation of these decomposition products is dependent mainly upon the concurrence of three factors: the presence of dead cells, an optimum supply of moisture, and a supply of oxygen sufficient to promote oxidation.

THE RUSTY-SPORED AGARICS

Volume 10, part 3, of *North American Flora*, by William A. Murrill, appeared June 25, 1917. The contents of this part may be indicated, as follows:

Genera	Total North American Species	New Species
Tapinia	2	
Paxillus	2	
Crepidotus	46	7
Tubaria	14	4
Galerula	33	8
Naucoria	65	2 I
Pluteolus,	15	4
Mycena	12	2
Phylloporus	1	
Gymnopilus	85	13
Hebeloma	49	17
	324	76

For the accommodation of those preferring currently accepted names, the following new combinations are proposed for species described as new in *Galerula*, *Mycena*, and *Gymnopilus*:

= Galera parvula GALERULA PARVULA GALERULA CONIFERARUM = Galera coniferarum = Galera glabra GALERULA GLABRA GALERULA HEMISPHAERICA = Galera hemisphaerica = Galera lignicola GALERULA LIGNICOLA GALERULA DISTANTIFOLIA = Galera distantifolia = Galera reflexa GALERULA REFLEXA = Galera mexicana GALERULA MEXICANA = Bolbitius flavus MYCENA FLAVA Mycena brunneidisca = Bolbitius brunneidiscus GYMNOPILUS ALABAMENSIS = Flammula alabamensis = Flammula fibrillosipes GYMNOPILUS FIBRILLOSIPES = Flammula castanea GYMNOPILUS CASTANEUS GYMNOPILUS SQUAMULOSUS = Flammula squamulosa = Flammula fagicola GYMNOPILUS FAGICOLA = Flammula flavidella GYMNOPILUS FLAVIDELLUS = Flammula unicolor GYMNOPILUS UNICOLOR GYMNOPILUS PICEINUS = Flammula piceina = Flammula aromatica GYMNOPILUS AROMATICUS = Flammula ludoviciana GYMNOPILUS LUDOVICIANUS = Flammula Abramsii GYMNOPILUS ABRAMSII GYMNOPILUS LONGISPORUS = Flammula longispora GYMNOPILUS OREGONENSIS = Flammula oregonensis

One species of *Hebeloma*, which had to be omitted from this part, is described, as follows:

Hebeloma cubense Murrill, sp. nov.

Pileus fleshy, convex, gregarious, 2 cm. broad; surface floccose with the remains of the veil, not striate, chestnut-brown; lamellae short-decurrent, crowded, broad, cinnamon, eroded on the edges; spores ellipsoid, regular, smooth, melleous under the microscope, $11-12 \times 7-8 \,\mu$; stipe flexuous, tough, fibrous, cylindric, floccose-fibrillose, pale-brown, solid, whitened below, 4 cm. long, 3–4 mm. thick; veil white, floccose, appendiculate.

Type collected on soil in a garden at Herradura, Cuba, June 15, 1907, F. S. Earle 560 (herb. N. Y. Bot. Gard.).

W. A. Murrill.